To: Gravatt, Dan[Gravatt.Dan@epa.gov]; Washburn, Ben[washburn.ben@epa.gov]

From: Ed Smith

Sent: Mon 6/16/2014 9:25:58 PM

Subject: Possible Offsite Radioactivity Detected by DNR in 2005 Near West Lake

Th-230 OffsiteMap2.JPG

2005 MDNR FUSRAP NC Haul Road Sampling Locations.pdf

DNR Doc1.pdf

All,

MCE and Dawn Chapman made a discovery today that we plan on addressing at the West Lake Landfill CAG meeting tonight, which starts at 6:30pm at the IUOE Local 513 union hall in Bridgeton.

A map shows locations where Thorium 230 was found by DNR in 2005 that show elevated Th-230.

Attached:

- 1) Map created by MCE based on the longitude/latitude of the samples collected by DNR in 2005
- 2) Longitude/latitude of samples collected by DNR
- 3) Look at DNR_Doc1 pg. (pdf) 24 of the attachment for sample VPSCR081705SL13, which shows Th-230 at 5+ pCi/g.
- 4) Look at DNR_Doc2 pg. (pdf) 23 of the attached in the following email (too big to attach all docs) for VPSCR081705SLOD, which shows Th-230 at 8+ pCi/g.

EPA approved the Supplemental Feasibility Study work plan, which established background levels for specific radioisotopes, including Th-230. Pg 11-

- 13: http://www.epa.gov/region7/cleanup/west_lake_landfill/pdf/mo_westlake_landfill_work_plan_feasibility_st
- Radium-226 = 1.3 pCi/g
- Radium-228 = 1.55 pCi/g
- Thorium 232 = 1.55 pCi/g (parent of Ra-228)
- Thorium-230 = 1.3 pCi/g (parent of Ra-226)
- Uranium-238 = 2.24 pCi/g (parent of U-234)
- Uranium 234 = 2.24 pCi/g (parent of Th-230)

At the last CAG meeting, Dan Gravatt, EPA Region 7 project manager for the West Lake Landfill stated at 1:59:00 that the attached DNR test from 2005 "did not find anything above background to my knowledge." https://www.youtube.com/watch?v=--EP6jLWjbU

It is my understanding that Th-230 for FUSRAP cleanup at the surface/ground level is 14 pCi/g of Th-230 + background. Clearly, the levels detected by DNR are not about FUSRAP cleanup levels but they do appear to be above background/naturally occurring levels.

MCE hopes to get some clarity tonight.

Best regards and GO USA men's national team!

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